

Claims

1. (Previously presented) In a wireless local area network wherein mobile units receive beacon signals from access points and associate with access points for data communications therewith, a method for controlling transmitter power level of a mobile unit, comprising:
transmitting from an access point to said mobile unit beacon signals that also include data representing transmitter power level for said access point;
receiving at said mobile unit said access point transmitter power level data; and
adjusting transmitter power level of said mobile unit in accordance with the value of said access point transmitter power level data included in said beacon signals.

2. (Original) A method according to Claim 1 wherein adjusting power level of said mobile unit comprises setting said mobile unit to a power level corresponding to said access point transmitter power level data.

3. (Original) A method according to Claim 1 wherein adjusting power level of said mobile unit comprises setting said mobile unit to a power level a selected amount greater than a power level corresponding to said access point transmitter power level data.

4. (Canceled)

5. (Original) A method according to Claim 1 wherein said adjusting power level of said mobile unit is performed when said mobile unit associates with an access point.

6. (Currently Amended) A mobile unit for use in a wireless local area network having access points transmitting at different power levels, comprising:

a receiver for receiving data signals including beacon signals from said access points;

a transmitter responsive to access point ~~transmitter~~ power level signals to transmit at a selected transmitter power level corresponding to said access point ~~transmitter~~ power level signals; and

a processor, coupled to process data signals from said receiver and programmed to derive access point power level data included in said beacon signals received from said access points and to provide corresponding transmitter power level signals to said transmitter.

7. (Original) A mobile unit as specified in Claim 6 wherein said processor is further programmed to provide maximum power level signals to said transmitter when said processor fails to derive said power level data from said received signals.

8. (Currently amended) A method for controlling interference in a wireless local area network having access points and mobile units, comprising:

providing access points including access points with adjustable transmitter power level and distributing said access points over an area with varying spacing between access points;

adjusting the transmitter power of said adjustable transmitter power level access points according to said access point spacing, wherein access points with greater spacing have greater transmitter power;

providing access points power level data representing transmitter power of said adjustable power level access points, and transmitting said access points power level data from each of said adjustable power level access points;

providing mobile units having transmitters responsive to power level signals for adjusting transmitter power of said mobile units;

receiving said access points power level data at said mobile units and providing power level signals corresponding thereto to said mobile unit transmitters,

wherein said access points transmit beacon signals for use by mobile units to associate with one of said access points, and wherein said access point power level data is transmitted within said beacon signals.

9. (Original) A method to Claim 8 wherein said power level data signals represent the same power level as said power level data

10. (Original) A method according to Claim 8 wherein said power level data signals represent a power level greater than the power level represented by said power level data.

11. (Canceled)

12. (Currently amended) A method according to Claim ~~11~~ 8 wherein said power level signals are provided to said mobile unit transmitter while said mobile unit is associating with an access point.

13. (Original) A method according to Claim 8 comprising the further step of providing maximum power level signals to said mobile unit transmitter when said mobile unit does not receive said power level data.